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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/762,876	06/11/2001	Nereu Gouvea	G334.312-1	9820

164 7590 11/07/2003

KINNEY & LANGE, P.A.
THE KINNEY & LANGE BUILDING
312 SOUTH THIRD STREET
MINNEAPOLIS, MN 55415-1002

EXAMINER	
NGUYEN, KIMNHUNG T	
ART UNIT	**PAPER NUMBER**
2674	10

DATE MAILED: 11/07/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/762,876	GOUVEA ET AL.	
	Examiner	Art Unit	
	Kimnhung Nguyen	2674	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-6 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-6 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6 .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

This application has been examined. The claims 1-6 are pending. The examination results are as following.

Specification

In the Specification: Missing Abstract and Summary Of The Invention.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-4 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Quanrud (US patent 6,140,983) in view of Vickers (US patent 6,414,249)

Regarding claim 1, Quanrud discloses in figure 1 a matrix analog system for the reproduction of images with sequential devices, built with dedicated component, transistors (TFT, see column 4, lines 14-17), passive element (see pixel 16), logic ports (see control signal logic 48, see figure 14) for the control of two-dimensions matrixes to activate light emitting pixels (16) of the traditional kind such as LED's (see figure 17, see column 26, lines 18), characterized by an analog pixel matrix command accomplished through 2 independent sequential distribution devices (see figure 15A, see column address and row address), controlling by means of its output of a number of pixels (see selector outputting to the pixel data from one memory cell at a time, see abstract), these devices have input (see input 24, see figure 2). However, Quanrud does not disclose an

input that allow for synchronization of the image through synchronizing pulse, present in the video signal and in a way to permit through an internal oscillator in each device. Vickers discloses in figure 2, the data formatter and timing controller (24) also receives a synchronization input signal from the host, the timing controller 24 is coupled to the frame memory (32) and corresponding to the red, green, and blue pixel (see column 4, lines 21-58). It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the teachings of using the timing controller 24 is coupled to the frame memory (32) and corresponding to the red, green, and blue pixel as taught by Vickers into the matrix analog system for the reproduction of images of Quanrud because this would be capacity necessary to store two full frames of six bits of luminance information for each pixel of a 640-column by 480-row display system (see Vickers, column 4, lines 55-58).

Regarding claim 3, Quanrud discloses the analog memory and drive for the pixels that do not power because the system only uses (LED, see column 24, lines 13-21)

Regarding claim 2, 4 and 6, which comprise the claimed element of claim 1 and rejected on the same reasons set forth in claim 1. Furthermore, Quanrud disclose the emitting light three primary colors (red, green and blue), However, Quanrud does not disclose an unit grip pixels and triple anode; the layering of phosphorus in its monochromatic and laid on top of the other at an angle of 90 degrees, and each one subdivided into three smaller grids as the phosphorus strips that cover the anode. Vickers discloses an unit grip pixel in figures 2-3, and triple anode (three anode strips 3R, 3G and 3 B, see figure 2, column 4, lines 15-20); the layering of phosphorus in its monochromatic and laid on top of the other

at an inherent angle of 90 degrees, and each one subdivided into three smaller grids as the phosphorus strips that cover the anode (see figures 10-11). It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the teachings of using the three anode strips 3R, 3G, and 3B as taught by Vickers into the matrix analog system for reproduction of images of Quanrud because this would be setting to a leveling accordance with the brightness characteristics of the corresponding luminescent material (see Vickers, column 4, lines 17-20).

3. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Quanrud (US patent 6,140,983) and Vickers (US patent 6,414,249) as applied to claim 1 above, and further in view of Nakamoto (US patent 6,031,328).

Quanrud discloses in figure 1 a matrix analog system for the reproduction of images with sequential devices, built with dedicated component, transistors (TFT, see column 4, lines 14-17), passive element (see pixel 16), logic ports (see control signal logic 48, see figure 14) for the control of two-dimensions matrixes to activate light emitting pixels (16) of the traditional kind such as LED's (see figure 17, see column 26, lines 18), characterized by an analog pixel matrix command accomplished through 2 independent sequential distribution devices (see figure 15A, see column address and row address), controlling by means of its output of a number of pixels (see selector outputting to the pixel data from one memory cell at a time, see abstract), these devices have input (see input 24, see figure 2). Vickers discloses in figure 2, the timing controller 24 is coupled to the frame memory (32) and corresponding to the red, green, and blue pixel (see column 4, lines 21-58). However, they do not the video signal is applied on the cold

cathode. Nakamoto disclose very small cold cathodes of conical shaped arranged in matrix on the cathode electrodes (cold cathodes, see abstract, see column 2, lines 43-50, and column 3, lines 43-65). It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the teachings of using the video signal is applied on the cold cathode as taught by Nakamoto into the matrix analog system for the reproduction of images of Quanrud and Vickers because this would be possible to emit light with high efficient, and addition the cold cathodes corresponding to pixels to be displayed and less power is consumed (see Nakamoto, column 9, lines 39-49).

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kimnhung Nguyen whose telephone number (703) 308-0425.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **RICHARD A HJERPE** can be reached on **(703) 305-4709.**

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D. C. 20231

Or faxed to:

(703) 872-9314 (for Technology Center 2600 only).

Hand-delivery response should be brought to: Crystal Park II, 2121 Crystal Drive, Arlington, VA Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Kimnhung Nguyen
October 27, 2003

RICHARD HJERPE
SUPERVISORY
TECHNOLOGY